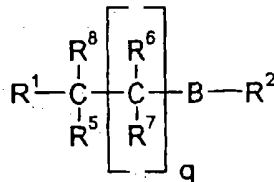


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WE CLAIM:

1. A compound of the formula:



5 wherein

B is CONR^a , NR^aCO , NR^aCO_2 or NR^aCONR^a ;

R^a represents hydrogen or (1-6C) alkyl,

q is zero or 1;

- 10 R^1 represents a naphthyl group or a phenyl, furyl, thienyl or pyridyl group which is unsubstituted or substituted by one or two substituents selected independently from halogen; nitro; cyano; hydroxyimino; (1-10C)alkyl; (2-10C)alkenyl; (2-10C)alkynyl; (3-8C)cycloalkyl; hydroxy(3-8C)cycloalkyl; oxo(3-8C)cycloalkyl; halo(1-10C)alkyl; $(\text{CH}_2)_y\text{X}^1\text{R}^9$ in which y is 0 or an integer of from 1 to 4, X^1
- 15 represents O, S, NR^{10} , CO, COO, OCO, CONR^{11} , NR^{12}CO , $\text{NR}^{12}\text{COCOO}$ or OCONR^{13} , R^9 represents hydrogen, (1-10C)alkyl, (3-10C)alkenyl, (3-10C)alkynyl, pyrrolidinyl, tetrahydrofuryl, morpholino or (3-8C)cycloalkyl and R^{10} , R^{11} , R^{12} and R^{13} each independently represents hydrogen or (1-10C)alkyl, or R^9 and R^{10} , R^{11} , R^{12} or R^{13} together with the nitrogen atom to
- 20 which they are attached form an azetidiny, pyrrolidinyl, piperidinyl or morpholino group; N-(1-4C)alkylpiperazinyl; N-phenyl(1-4C)alkylpiperazinyl; thienyl; furyl; oxazolyl; isoxazolyl; pyrazolyl; imidazolyl; thiazolyl; pyridyl; pyridazinyl; pyrimidinyl; dihydro-thienyl; dihydrofuryl; dihydrothiopyranyl; dihydropyranyl; dihydrothiazolyl; (1-4C)alkoxycarbonyldihydrothiazolyl; (1-4C)alkoxycarbonyldimethyldihydrothiazolyl; tetrahydro-thienyl; tetrahydrofuryl; tetrahydrothiopyranyl; tetrahydropyranyl; indolyl; benzofuryl; benzothienyl; benzimidazolyl; and a group of formula $\text{R}^{14}-(\text{L}^a)_n-\text{X}^2-(\text{L}^b)_m$ in which X^2
- 25

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- represents a bond, O, NH, S, SO, SO₂, CO, CH(OH), CONH, NHCO, NHCONH, NHCOO, COCONH, OCH₂CONH or CH=CH, L^a and L^b each represent (1-4C)alkylene, one of n and m is 0 or 1 and the other is 0, and R¹⁴ represents a phenyl or heteroaromatic group which is unsubstituted or substituted by one or two of halogen, nitro, cyano, hydroxyimino, (1-10C) alkyl, (2-10C)alkenyl, (2-10C)alkynyl, (3-8C)-cycloalkyl, 4-(1,1-dioxotetrahydro-1,2-thiazinyl), halo(1-10C)alkyl, cyano(2-10C)alkenyl, phenyl, and (CH₂)_zX³R¹⁵ in which z is 0 or an integer of from 1 to 4, X³ represents O, S, NR¹⁶, CO, CH(OH), COO, OCO, CONR¹⁷, NR¹⁸CO, NHSO₂, NHSO₂NR¹⁷, NHCONH, OCONR¹⁹ or NR¹⁹COO, R¹⁵ represents hydrogen, (1-10C)alkyl, phenyl(1-4C)alkyl, halo(1-10C)alkyl, (1-4C)alkoxycarbonyl(1-4C)alkyl, (1-4C)alkylsulfonylamino(1-4C)alkyl, (N-(1-4C)alkoxycarbonyl)(1-4C)alkylsulfonylamino-(1-4C)alkyl, (3-10C)alkenyl, (3-10C)alkynyl, (3-8C)-cycloalkyl, camphoryl or an aromatic or heteroaromatic group which is unsubstituted or substituted by one or two of halogen, (1-4C)alkyl, halo(1-4C)alkyl, di(1-4C)alkylamino and (1-4C)alkoxy and R¹⁶, R¹⁷, R¹⁸ and R¹⁹ each independently represents hydrogen or (1-10C)alkyl, or R¹⁵ and R¹⁶, R¹⁷, R¹⁸ or R¹⁹ together with the nitrogen atom to which they are attached form an azetidiny, pyrrolidinyl, piperidinyl or morpholino group;
- R² represents hydrogen, (1-6C)alkyl, (3-6C)cycloalkyl, fluoro(1-6C)alkyl, chloro(1-6C)alkyl, (2-6C)alkenyl, (1-4C)alkoxy(1-4C)alkyl, (1-4C)alkylCO₂(1-4C)alkyl, phenyl(1-6C)alkyl, heteroaromatic, phenyl which is unsubstituted or substituted by halogen, (1-4C)alkyl or (1-4C)alkoxy, or a group of formula R³R⁴N in which R³ and R⁴ each independently represents (1-4C)alkyl or, together with the nitrogen atom to which they are attached form an azetidiny, pyrrolidinyl, piperidinyl, morpholino, piperazinyl, hexahydroazepinyl or octahydroazocinyl group; and

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R⁵, R⁶, R⁷ and R⁸ are each independently selected from the group consisting of hydrogen, (1-6C)alkyl; aryl(1-6C)alkyl; (2-6C)alkenyl; aryl(2-6C)alkenyl and aryl; or

5 two of R⁵, R⁶, R⁷ and R⁸ together with the carbon atom or carbon atoms to which they are attached form a (3-8C) carbocyclic ring; and the remainder of R⁵, R⁶, R⁷ and R⁸ represent hydrogen; or a pharmaceutically acceptable salt thereof;

with the proviso that when R² represents R³R⁴N, then B is other than
10 NR^aCONR^a or CONR^a.

2. A compound according to claim 1 wherein B is CONR^a.

3. A compound according to claim 1 wherein B is NR^aCO.

15

4. A compound according to claim 1 wherein B is NR^aCO₂.

5. A compound according to claim 1 wherein B is NR^aCONR^a.

20

6. A compound as claimed in any one of claims 1 to 5 wherein q is 1.

7. A compound as claimed in any one of claims 1 to 5 wherein R^a is hydrogen.

25

8. A compound as claimed in any one of claims 1-5 wherein R² represents hydrogen, (1-6C)alkyl, (3-6C)cycloalkyl, fluoro(1-6C)alkyl, chloro(1-6C)alkyl, (2-6C)alkenyl 1-4C)alkoxy(1-4C)alkyl, heteroaromatic, or phenyl which is unsubstituted or substituted by halogen, (1-4C)alkyl or (1-4C)alkoxy.

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9. A compound according to claim 8 wherein R^2 represents hydrogen, (1-6C)alkyl, (3-6C)cycloalkyl or heteroaromatic, or phenyl which is unsubstituted or substituted by halogen, (1-4C)alkyl or (1-4C)alkoxy.

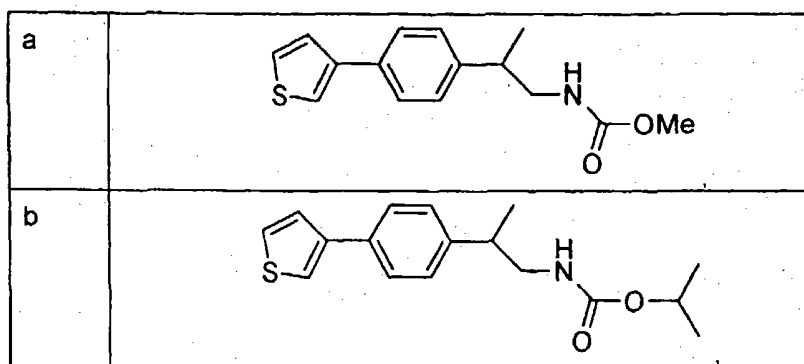
10. A compound according to claim 9 wherein R^2 represents methyl, ethyl, isopropyl, t-butyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, isovaleryl, phenyl, benzyl, 2-furyl, 2-thienyl, 5-oxazolyl, 2-pyridyl, 3-pyridyl, 4-pyridyl

11. A compound as claimed in any one of claims 1-5 wherein q is 1 and R^6 and R^7 represent hydrogen.

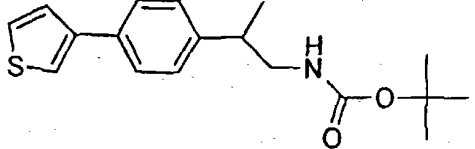
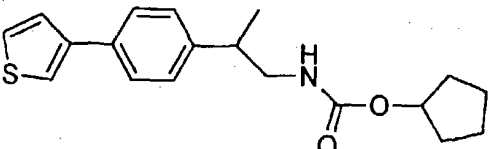
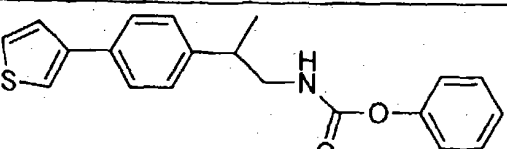
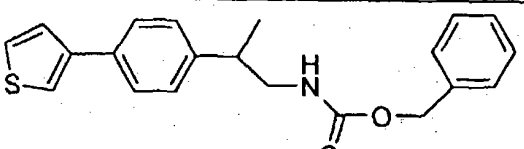
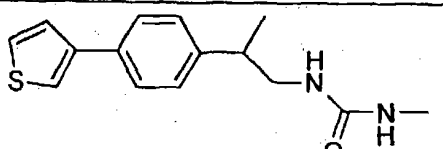
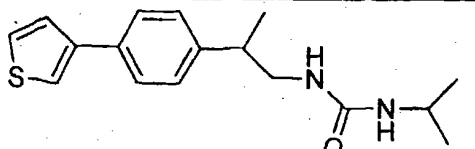
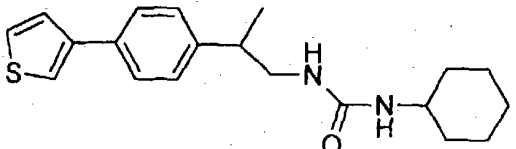
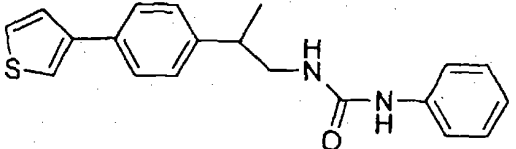
12. A compound according to claim 11 wherein R^5 and R^8 are each independently hydrogen or (1-4C)alkyl, or together with the carbon atom to which they are attached form a (3-8C) carbocyclic ring.

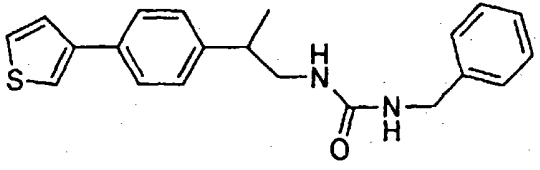
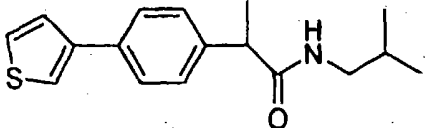
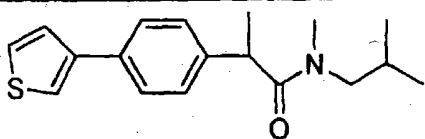
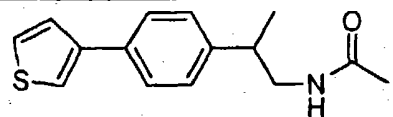
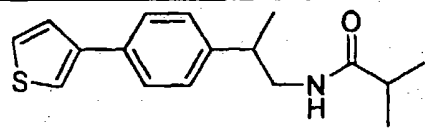
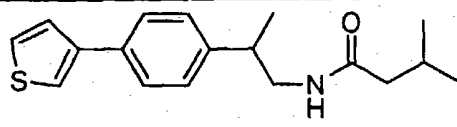
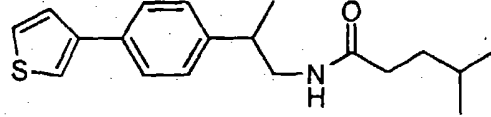
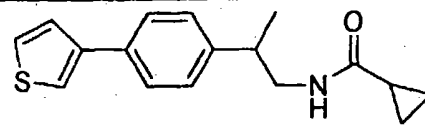
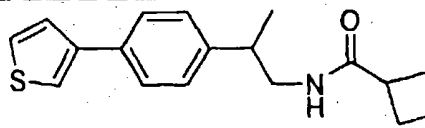
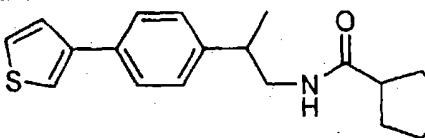
13. A compound as claimed in any one of claims 1-12 wherein R^8 represents methyl and R^5 represents hydrogen.

14. A compound as claimed in Claim 1, which is selected from:

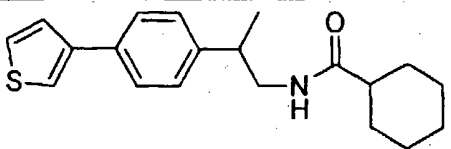
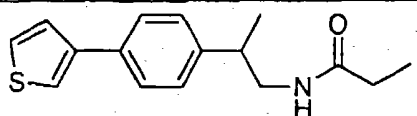
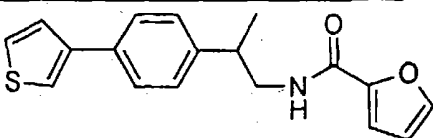
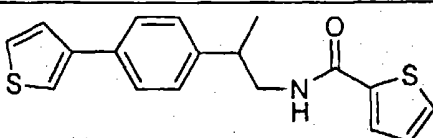
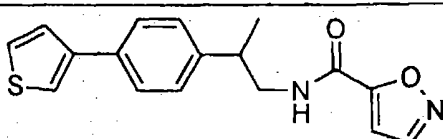
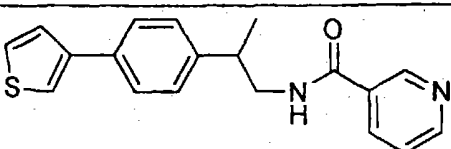
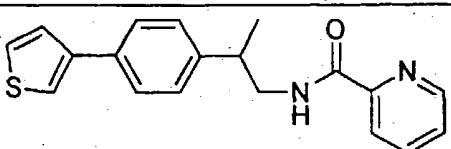
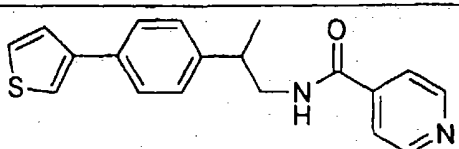
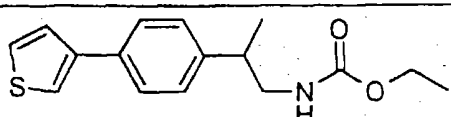


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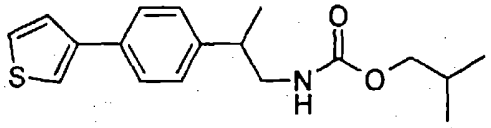
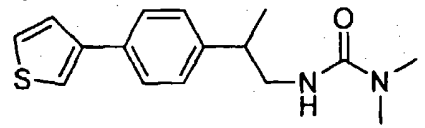
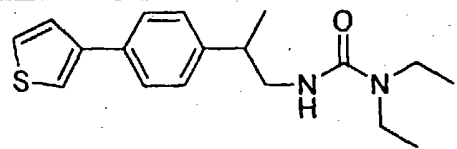
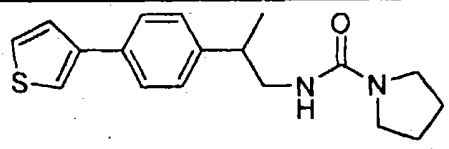
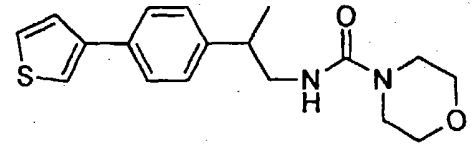
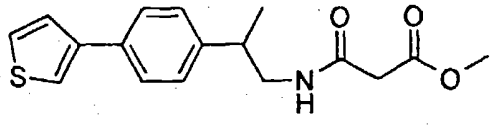
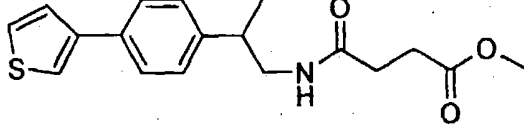
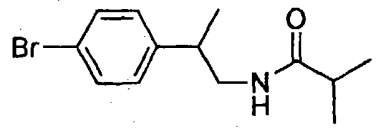
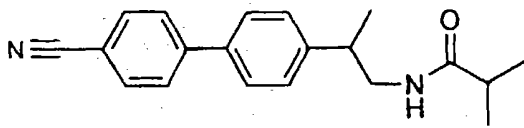
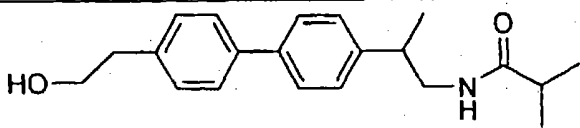
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k	 <chem>CC(Cc1ccc(cc1)-c2ccsc2)NC(=O)NCC3=CC=CC=C3</chem>
m	 <chem>CC(C)CCNC(=O)C(C)Cc1ccc(cc1)-c2ccsc2</chem>
n	 <chem>CC(C)CN(C)C(=O)C(C)Cc1ccc(cc1)-c2ccsc2</chem>
o	 <chem>CC(=O)NC(C)Cc1ccc(cc1)-c2ccsc2</chem>
p	 <chem>CC(C)C(=O)NC(C)Cc1ccc(cc1)-c2ccsc2</chem>
q	 <chem>CC(C)C(=O)NC(C)Cc1ccc(cc1)-c2ccsc2</chem>
r	 <chem>CC(C)C(=O)NC(C)Cc1ccc(cc1)-c2ccsc2</chem>
s	 <chem>C1CC1C(=O)NC(C)Cc1ccc(cc1)-c2ccsc2</chem>
t	 <chem>C1CCC1C(=O)NC(C)Cc1ccc(cc1)-c2ccsc2</chem>
u	 <chem>C1CCCC1C(=O)NC(C)Cc1ccc(cc1)-c2ccsc2</chem>

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v	 <chem>CC(C)CNC(=O)C1CCCCC1c2ccc(cc2)c3ccsc3</chem>
w	 <chem>CC(C)CNC(=O)CCc4ccc(cc4)c5ccsc5</chem>
x	 <chem>CC(C)CNC(=O)c1ccoc1c2ccc(cc2)c3ccsc3</chem>
y	 <chem>CC(C)CNC(=O)c1ccsc1c2ccc(cc2)c3ccsc3</chem>
z	 <chem>CC(C)CNC(=O)c1ccoc1n2ccccc2c2ccc(cc2)c3ccsc3</chem>
aa	 <chem>CC(C)CNC(=O)c1ccncc1c2ccc(cc2)c3ccsc3</chem>
bb	 <chem>CC(C)CNC(=O)c1ccncc1c2ccc(cc2)c3ccsc3</chem>
cc	 <chem>CC(C)CNC(=O)c1ccncc1c2ccc(cc2)c3ccsc3</chem>
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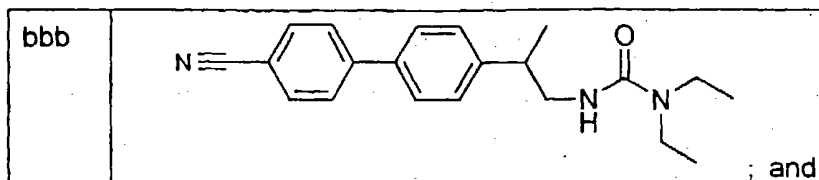
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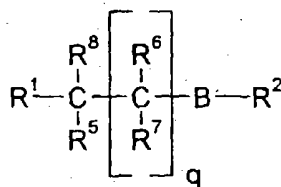
-113-



pharmaceutically acceptable salts thereof.

15. A pharmaceutical composition, which comprises a compound as
 5 claimed in claim 1 and a pharmaceutically acceptable diluent or carrier.

16. A method of potentiating glutamate receptor function in a mammal
 requiring such treatment, which comprises administering an effective amount of a
 compound of formula:



10 wherein

B is CONR^a , NR^aCO , NR^aCO_2 or NR^aCONR^a ;

R^a represents hydrogen or (1-6C) alkyl,

q is zero or 1;

R^1 represents an unsubstituted or substituted aromatic or heteroaromatic group;

15

R^2 represents hydrogen, (1-6C)alkyl, (3-6C)cycloalkyl, fluoro(1-6C)alkyl,
 chloro(1-6C)alkyl, (2-6C)alkenyl, (1-4C)alkoxy(1-4C)alkyl, (1-4C)alkyl CO_2 (1-
 4C)alkyl, phenyl(1-6C)alkyl, heteroaromatic, phenyl which is unsubstituted or
 substituted by halogen, (1-4C)alkyl or (1-4C)alkoxy, or a group of formula

- 20 R^3R^4N in which R^3 and R^4 each independently represents (1-4C)alkyl or,
 together with the nitrogen atom to which they are attached form an azetidiny,
 pyrrolidinyl, piperidinyl, morpholino, piperazinyl, hexahydroazepinyl or
 octahydroazocinyl group; and

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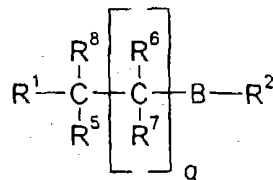
R^5 , R^6 , R^7 and R^8 are each independently selected from the group consisting of hydrogen, (1-6C)alkyl; aryl(1-6C)alkyl; (2-6C)alkenyl; aryl(2-6C)alkenyl and aryl; or

- 5 two of R^5 , R^6 , R^7 and R^8 together with the carbon atom or carbon atoms to which they are attached form a (3-8C) carbocyclic ring; and the remainder of R^5 , R^6 , R^7 and R^8 represent hydrogen; or a pharmaceutically acceptable salt thereof;
- with the proviso that when R^2 represents R^3R^4N , then B is other than
- 10 NR^aCONR^a or $CONR^a$.

17. A method of potentiating glutamate receptor function in a mammal requiring such treatment, which comprises administering an effective amount of a compound of claim 1.

15

18. A method of treating a cognitive disorder; a neuro-degenerative disorder; age-related dementia; age-induced memory impairment; movement disorder; reversal of a drug-induced state; depression; attention deficit disorder; attention deficit hyperactivity disorder; psychosis; cognitive deficits associated
- 20 with psychosis; or drug-induced psychosis in a patient, which comprises administering to a patient in need thereof an effective amount of a compound of formula:



wherein

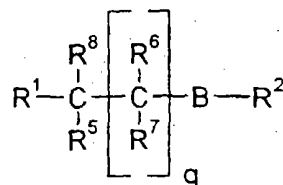
- 25 B is $CONR^a$, NR^aCO , NR^aCO_2 or NR^aCONR^a ;
 R^a represents hydrogen or (1-6C) alkyl;
 q is zero or 1;
 R^1 represents an unsubstituted or substituted aromatic or heteroaromatic group;

- 5 R^2 represents hydrogen, (1-6C)alkyl, (3-6C)cycloalkyl, fluoro(1-6C)alkyl, chloro(1-6C)alkyl, (2-6C)alkenyl, (1-4C)alkoxy(1-4C)alkyl, (1-4C)alkylCO₂(1-4C)alkyl, phenyl(1-6C)alkyl, heteroaromatic, phenyl which is unsubstituted or substituted by halogen, (1-4C)alkyl or (1-4C)alkoxy, or a group of formula R^3R^4N in which R^3 and R^4 each independently represents (1-4C)alkyl or, together with the nitrogen atom to which they are attached form an azetidiny, pyrrolidiny, piperidiny, morpholino, piperaziny, hexahydroazepiny or octahydroazociny group; and
- 10 R^5 , R^6 , R^7 and R^8 are each independently selected from the group consisting of hydrogen, (1-6C)alkyl; aryl(1-6C)alkyl; (2-6C)alkenyl; aryl(2-6C)alkenyl and aryl; or
- 15 two of R^5 , R^6 , R^7 and R^8 together with the carbon atom or carbon atoms to which they are attached form a (3-8C) carbocyclic ring; and the remainder of R^5 , R^6 , R^7 and R^8 represent hydrogen; or a pharmaceutically acceptable salt thereof;
- 20 with the proviso that when R^2 represents R^3R^4N , then B is other than NR^aCONR^a or $CONR^a$.

19. A method of treating a cognitive disorder; a neuro-degenerative disorder; age-related dementia; age-induced memory impairment; movement disorder; reversal of a drug-induced state; depression; attention deficit disorder; attention deficit hyperactivity disorder; psychosis; cognitive deficits associated with psychosis; or drug-induced psychosis in a patient, which comprises administering to a patient in need thereof an effective amount of a compound according to claim 1.

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20. A method for improving memory or learning ability in a patient, which comprises administering to a patient in need thereof an effective amount of a compound of formula:



5 wherein

B is CONR^a , NR^aCO , NR^aCO_2 or NR^aCONR^a ;

R^a represents hydrogen or (1-6C) alkyl,

q is zero or 1;

R^1 represents an unsubstituted or substituted aromatic or heteroaromatic group;

10

R^2 represents hydrogen, (1-6C)alkyl, (3-6C)cycloalkyl, fluoro(1-6C)alkyl, chloro(1-6C)alkyl, (2-6C)alkenyl, (1-4C)alkoxy(1-4C)alkyl, (1-4C)alkyl CO_2 (1-4C)alkyl, phenyl(1-6C)alkyl, heteroaromatic, phenyl which is unsubstituted or substituted by halogen, (1-4C)alkyl or (1-4C)alkoxy, or a group of formula

15 $\text{R}^3\text{R}^4\text{N}$ in which R^3 and R^4 each independently represents (1-4C)alkyl or, together with the nitrogen atom to which they are attached form an azetidiny, pyrrolidiny, piperidiny, morpholino, piperaziny, hexahydroazepiny or octahydroazociny group; and

20 R^5 , R^6 , R^7 and R^8 are each independently selected from the group consisting of hydrogen, (1-6C)alkyl; aryl(1-6C)alkyl; (2-6C)alkenyl; aryl(2-6C)alkenyl and aryl; or

two of R^5 , R^6 , R^7 and R^8 together with the carbon atom or carbon atoms to
25 which they are attached form a (3-8C) carbocyclic ring; and the remainder of R^5 , R^6 , R^7 and R^8 represent hydrogen; or a pharmaceutically acceptable salt thereof;

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with the proviso that when R^2 represents R^3R^4N , then B is other than NR^aCONR^a or $CONR^a$.

21. A method for improving memory or learning ability in a patient,
5 which comprises administering to a patient in need thereof an effective amount
of a compound according to claim 1.